
Minutes

Board of Natural Resources

December 2, 2003
Natural Resources Building, Olympia, Washington

BOARD MEMBERS PRESENT

Doug Sutherland, Commissioner of Public Lands

Bob Nichols for Governor Gary Locke

Terry Bergeson, Superintendent of Public Instruction

Glen Huntingford, Commissioner, Jefferson County

Bruce Bare, Dean, University of Washington, College of Forest Resources

R. James Cook, Interim Dean, Washington State University, College of Agriculture and Home Economics

BOARD MEMBERS ABSENT

CALL TO ORDER

Chair Sutherland called the meeting to order at 9:15 a.m. on Tuesday, December 2, 2003, in Room 172 of the Natural Resources Building.

APPROVAL OF MINUTES

The November 10, meeting minutes, were not approved as presented. Bruce Bare requested that a discussion between he and Angus Brodie regarding the mix and match approach during the sustainable harvest presentation be reflected more definitively in the minutes.

Chair Sutherland suggested deferring the approval of the minutes until the January 8, Board meeting.

The Board agreed.

PUBLIC COMMENTS FOR ACTION ITEMS

Paula Swedeen - Washington Department of Fish & Wildlife (Handout 1)

Chair Sutherland noted that he would make an exception to Ms. Swedeen's testimony due to her need to attend the Forest Practices Meeting taking place simultaneously (should be under "Public Comment for Items of General Interest").

Ms. Swedeen provided the Board members with a letter/list of recommended criteria for the Board to consider (Handout 1) that addressed two topics, 1) list of recommendations concerning the biophysical criteria by which the Board will evaluate the results of the Draft Environmental Impact Statement (DEIS) Sustainable Harvest Calculation Alternatives and any additional alternatives chosen by the Board for DNR to model, and 2) WDFW is concerned with the assumptions used in Alternatives 2-6 for marbled murrelets.

She added that WDFW has a good working relationship with the team that is putting together the long-term murrelet strategy under the HCP and noted that her comments are a reflection on technical aspects of the modeling assumptions, not a reflection of the working relationship with DNR or their confidence in DNR staff.

She then paraphrased the letter (Handout 1), which had nine recommendations for criteria for the Board's consideration to be placed under the heading of "Key Outcomes" to be discussed later during the sustainable harvest calculation workshop. In brief, the recommended criteria is:

1) Forest structure by planning unit; 2) benefit or impact to older forest-dependent species, including a more detailed analysis of impacts to marbled murrelets; 3) fragmentation index (of young forest, competitive exclusion, and structurally complex forest) - she noted that there are computer analysis programs that would easily overlay with the data structure DNR already has in their model; 4) benefit or impact to riparian dependent species, including fish; 5) estimated road densities by alternative over time; 6) slope stability risk by alternative over time - already included in DEIS; 7) soil compaction by alternative over time - already included in DEIS; 8) sedimentation by alternative over time - already included in DEIS; and 9) cumulative effects (project existing conditions to 2067 across alternatives). She noted that there are good data tables in Appendix E that provide figures by WAU but only cover existing conditions and she suggested that the Board ask DNR to extend that analysis to two different time points across all of the alternatives - perhaps 2013 and 2067. Ms. Swedeen stated that WDFW is available for technical consultation with DNR staff and the Board.

Ms. Swedeen concluded by reading an excerpt from the letter:

Page 3 ...we have the following concerns regarding the assumptions modeled for the marbled murrelets. These assumptions are described in Appendix B, Table B.2.3, and in a note at the bottom of the table. The assumptions remove site-specific deferral of occupied sites in 2007, and supposedly reflect a "landscape approach" to marbled murrelet management. In the model some unspecified number of occupied sites are harvested or are treated in a manner inconsistent with protecting the integrity of the nest stand. We do not believe these assumptions are consistent with DNR's HCP, nor do we believe these assumptions reflect a realistic outcome to the ongoing negotiations of the long-term murrelet strategy. Conservation science regarding the marbled murrelet does not currently support removal of protection for known occupied murrelet sites. Furthermore, the HCP, its accompanying EIS, and the federal Marbled Murrelet Recovery Plan stress the importance of protecting known occupied sites through the long-term plan.

At some point in the future, science may provide data to suggest the population can withstand loss of some occupied sites, or we may have acquired the expertise to conduct active management in occupied sites without degrading the nesting suitability of those sites. However, we are not near that point now. Given the trajectory of current research and in-growth of new suitable murrelet nesting habitat, WDFW does not anticipate that removal of site-specific protection or engagement in active management in occupied sites will be warranted for some time, beyond the timeframe in which a long-term strategy will be negotiated. Landscape planning is important for murrelets, but includes consideration of where to retain suitable unoccupied habitat, and where to devote efforts to create new habitat. Landscape approaches at this point do not include being able to move away from site-specific protection of known sites. Therefore, to the extent that the assumptions in Alternatives 2-6 reflect the policy intent of DNR for its long-term strategy, WDFW has significant concerns. We would not support a strategy that looks like the current modeled assumptions. If these assumptions do not reflect policy intent, we question why they were included in the model. We request that the Board direct DNR to analyze the impacts of the current assumptions to known occupied sites, or re-run the model with assumptions that protect occupied sites.

Chair Sutherland noted that the comments had not yet been extended to DNR staff and he asked that WDFW meet with DNR staff to discuss these particular assumptions and concerns. He added that the two agencies have been meeting on a regular basis and he is concerned about why these issues are being raised so late. He clarified a portion of Ms. Swedeen's statement which expresses that WDFW would not support a strategy that looks like the current model assumptions, and he said that this is a serious comment and it causes a degree of concern and reiterated that the two agencies meeting to address it.

Ms. Swedeen responded that WDFW has requested detailed assumptions within the model for the murrelet strategy through scoping comments and meetings with DNR and the response received was that DNR has place holder assumptions and that the model will be rerun once the long-term strategy is conducted. WDFW is engaged in the long-term strategy discussions with DNR but those discussions have not included outlining a strategy that looks like the one in the assumptions. She noted that their first detailed look at the assumptions in the model came when the DEIS was released.

Bill Robinson - The Nature Conservancy

Mr. Robinson stated that The Nature Conservancy supports the Jackman Creek and Skagit Parcels trust land transfers. He noted that both transactions had legislative support as well as community support. The trust land transfer program was not part of the Governor's budget but was added in both the House and Senate versions of the budget and that came from a great deal of support from the local community. Local citizens and local businesses contacted legislators in support of the two transactions.

Both projects expand the wild habitat in the Skagit River area. They have been identified as areas to protect and restore salmon, eagles, bull trout, and steel head. The Skagit parcels are also part of the spotted owl habitat. Mr. Robinson expressed his support for the efforts of DNR and appreciated the project being brought before the Board.

LAND TRANSACTIONS

Jackman Creek Trust Land Transfer # 02-074911 (Handouts 2 & 3)

Evert Challstedt presented the Jackman Creek and Skagit Parcels trust land transfers together although they have individual resolutions. Mr. Challstedt displayed the properties on an overhead map noting their location in Skagit County.

Jackman Creek comprises 640 acres - 222 acres of 200+year silver fir and hemlock; 301 acres of 30-year silver fir and hemlock; 117 acres of 15-year silver fir and hemlock; forest soil site index 80; no legal access; HCP designation is Nesting Roosting and Foraging for the Northern Spotted Owl. Market values as determined by a third party appraiser are: timber \$740,000; land \$362,500; Total \$1,102,500.

Skagit Phase 1 is comprised of three properties totaling 759 acres - Rocky Creek (640 acres), Corkindale Roost (80 acres), and Sutter Creek (39 acres). This package includes the Common School Trust component of the Skagit Transfer. Phase II, to be introduced to the Board later in the year, will include Forest Board properties that must be exchanged for equal valued common school trust properties prior to transfer. Appraisals are still in process for the latter properties. Collectively Skagit Phase I properties include 725 acres of 60 to 100 year old Douglas-fir and 34 acres of 20 year old silver fir. The properties are without legal access and the HCP designation is Nesting, Roosting and Foraging. Market values for all three properties are \$10,030,000 for timber and \$266,500 for land.

Both Jackman Creek and Skagit Properties will be transferred under the following conditions: The recipient will be Washington Department of Fish and Wildlife; minerals will be retained by the Common School Trust; the land will remain subject to the Departments Habitat Conservation Plan; use will be restricted to benefit fish and wildlife habitat for a minimum period of 30 years as provided by legislation. Benefits of the transfers: The trust divests of isolated property; The timber value is deposited into the common school construction account and the land value is reinvested in productive land to benefit the trust; wildlife habitat is protected and managed by WDFW.

Glen Huntingford asked if there are other activities such as hunting and fishing or is it strictly habitat use?

Mr. Challstedt said he assumes hunting and fishing can occur on the property as long as habitat is protected. Hunting and fishing access would be determined by WDFW, the managing agency. He then noted a letter that was received yesterday (Handout 3) from Skagit County Commissioners expressing concern about the eroding of the commercial forest base within the county. Property included in these two transfers is steep, rocky and not productive for commercial forest production. The land has been recognized and protected for it's habitat value under the HCP. The department recommends approval.

Glen Huntingford recognized that there is money being received for the timber value and the land but asked what that does for ongoing revenue over the years noting that there should be an additional value on the land for the habitat?

Mr. Challstedt said the legislation directs that it be transferred at market value and third party appraisers are employed to determine that value and to ensure it is received. The appraisal rules of market value do no include consideration for habitat values.

MOTION: Terry Bergeson moved to approve the Jackman Creek Transfer, Resolution #1103.

SECOND: Bruce Bare seconded.

ACTION: Motion passed unanimously.

Skagit Parcels Trust Land Transfer # 02-074915 (Handout 2)

MOTION: Terry Bergeson moved to approve the Skagit Parcels Transfer, Resolution #1104.

SECOND: Bruce Bare seconded.

ACTION: Motion passed unanimously.

Anderson Acquisition # 08-074879 (Handout 4)

Evert Challstedt presented the acquisition of this 40 acre property noting its location in Pacific County 12 miles south of Raymond. It has 1,733 mbf of merchantable hemlock and fir; seller has partial access on Trap Creek Road and is currently unable to access the property due to Murrelet habitat. Purchase price is \$240,000; supported by investment value for 8 year delayed harvest. The property will be acquired to benefit the Common School Trust. Benefits: Removes a private inholding from the trust block; trust acquires merchantable timber; removes third party access over Trap Creek Road.

Glen Huntingford asked if there are any murrelet restrictions on the property?

Mr. Challstedt said no.

MOTION: Terry Bergeson moved to approve Resolution #1105.

SECOND: Bruce Bare seconded.

ACTION: Motion passed unanimously.

TIMBER SALES

Proposed Timber Sales for January 2004 (Handout 5)

Jon Tweedale - Product Sales Manager, began with a market update noting two forestry workshops he had attended. He said one focused on suppliers and purchasers looking at ways to be innovative for a strong future and the other focused on logistics such as rail and barge. He pointed out materials he had provided to the Board containing information about the workshops (included in his timber packet) and noted some feedback received that indicated DNR timber is some of the best quality on the west coast. DNR has grown consistent stands with consistent ring counts providing the opportunity to add value to the final product (primary and secondary). The feedback validated much of the work DNR has done over the years and indicates that marketing strategies have been successful.

The Canadian log imports took a big spike primarily because of the duty and the change in the exchange rate which curtailed production of lumber material but increased Canadian log imports into the US by ½ billion board feet per year, which is about 100% more than they have historically produced and those log imports have essentially stopped, due to the pipeline inventories being full, weather conditions, the IWA strike in BC, etc.

New mill capacity in Washington - about half of the mills are being designed to handle larger logs (up to 36'), which is contrary to where the markets have been moving.

Bruce Bare asked how many large log sawmills exist in western Washington?

Mr. Tweedale said he would query DNR's database and let the Board know. He said about 6.

Bob Nichols asked why there are new mills coming into the state to deal with larger diameter timber?

Mr. Tweedale said because of the excess supply of low ring count wood.

Terry Bergeson brought up timber dependent communities and thought those communities could benefit from the knowledge gained at the workshops Mr. Tweedale had attended and asked if they were present at the workshops?

Mr. Tweedale said they were present. He also noted that DNR is participating in a study with the University of Washington and that study will benefit the Olympic Region and the Northwest Region in terms of balancing supply and demand.

Terry Bergeson asked if there is anyone pulling all of this information together to provide forecasts and indicate to communities what they should be doing?

Mr. Tweedale said that he resides on a committee that Charlie Cortelyou - Olympic Region Manager, has put together a group called "Black Box Group" and that group looks at how to participate in economic development.

Mr. Tweedale then gave a brief overview of the results of the November timber sales: 7 sales offered and 7 sold; 20.5 mmbf offered and 20.5 mbf sold; \$4.2 million minimum bid and \$5.4 million sold; \$205/mbf offered and \$264/mbf sold; average # of bidders 4; 29% above minimum bid.

Glen Huntingford noted that the number of bidders seems higher over the last two years and wondered why it has increased?

Mr. Tweedale said it has increased over the last three years from 2.5 to over 4.2. The bidder pool has increased due to the type of wood, the type of offerings, and the market place.

He then summarized where the department is heading for FY '04 showing a chart (Slide 5). Plan to offer 570/mmbf; currently at 303/mmbf (thru the January package).

Proposed January 2004 timber sales: 16 sales at 71mmbf; \$15.1 million minimum bid; average \$213/mbf.

Bruce Bare brought up two of the scale sales noting that the minimum bid price is different than the value of the board feet on the summary and asked why?

Mr. Tweedale said the summary includes multiple species?

MOTION: Terry Bergeson moved to approve January 2004 Timber Sales.

SECOND: Glen Huntingford seconded.

ACTION: Motion passed unanimously.

DISCUSSION: Bob Nichols brought up the statewide timber sale summary report that Mr. Tweedale had provided, and asked him what the "remaining" category represented.

Mr. Tweedale said it is the remaining volume in inventory that has been sold but the companies have not made those removals yet.

Chair Sutherland requested that Mr. Tweedale provide a presentation of "cookies" which show ring counts of a variety of species? He suggested the presentation take place in March or April 2004.

Mr. Tweedale said he would like to provide that presentation and added that he would select specific forests as well.

Break 10:20

Reconvened at 10:40

CHAIR REPORTS

Chair Sutherland informed the Board of some recent staff changes within the department:

John Baarspul retired as Division Manager of the Land Management Division and Gretchen Nicholas (previous South Puget Sound Region Manager) filled the position. Art Tasker will fill her position in the region during the interim.

Clay Sprague will take on a new project in Executive Management; the revision of the Forest Resource Plan (until mid 2005). He has a team of four.

Vicki Christiansen - Central Region Manager, has been assigned to merge the Southwest and Central Regions. This has been underway for nine months and the estimated savings after the merge will be about \$1 million per year. He commended Ms. Christiansen for her efforts in bringing these two regions together and the immense challenge it has been. He said that in one week the closure of the two regions will take place and a new name would be announced for the new region.

Chair Sutherland alerted the Board that the compound (warehouse facility for tools, equipment, fire program, fabrication shop, fleet management, etc.) site on Marvin Road and Martin Way in Lacey will be closed. The 39-acre parcel is located in the middle of a commercial area with significant commercial development needs. It was built in the 1930's and doesn't meet current code therefore difficult to maintain. The department has been authorized by the Legislature to dispose of the site and the sale of the site will be brought to the Board in March 2004. There has been significant marketing taking place and the interest has been enormous. There is a purchase and sale agreement in place for a 40-acre parcel near the Olympia Airport where a new facility can be constructed.

PUBLIC COMMENTS FOR GENERAL ITEMS OF INTEREST

Russ Pfeiffer-Hoyt - Legislative Representative for the Mt. Baker School District (Handout 6)

Mr. Pfeiffer-Hoyt expressed concern for an upcoming action regarding the Lake Whatcom Landscape Plan. He spoke as the legislative representative for the Mt. Baker School Board stating that the Mt. Baker School District is the largest local recipient of revenue from the lands covered by the landscape plan and the funds are valuable in their efforts to provide quality education for the children.

The issue of greatest concern is the full compensation for the loss of revenue that would result from the adoption of the Lake Whatcom Landscape Plan Preferred Alternative. In the trust category that includes the Mt. Baker School District, forest management would be constrained on 60% of the land area. When land is designated as a natural resources conservation area the trust beneficiaries are fully compensated. The District believes that the action to conservation status deserves the same full compensation. In addition to compensating beneficiaries, DNR also needs compensation for the management and environmental protection costs that would not be covered by the reduced timber revenue.

He also expressed concern about the precedent that might be set by arbitrarily singling out the Lake Whatcom watershed for special regulations based on its status as a municipal water supply. In Whatcom County alone, most DNR-managed land is in the Nooksack River watershed, which provides water for the cities of Lynden and Ferndale. If the Board of Natural Resources chooses to adopt the Lake Whatcom Landscape Plan Preferred Alternative, he asked that the Board make that adoption contingent on securing full compensation of the lost revenue for the trust beneficiaries.

Chair Sutherland said that the Lake Whatcom Preferred Alternative would be presented to the Board at the January 8, 2004 meeting, reminding the Board of the new date (moved from Tuesday, January 6, to Thursday, January 8).

Eric Harlow - Washington Forest Law Center (Handout 7)

Mr. Harlow encouraged the Board to consider their role in the approval of the SHC DEIS. The purpose of an EIS is to disclose the environmental impacts to the decision maker and the public so an appropriate decision can be made, however, on Page 218 of the EIS it states, "each alternative has two major components; the first is a set of policy and procedural changes necessary to accomplish the goals of that

alternative; second, the decadal sustainable harvest levels by ownership group trusts.” It continued with, “the modeling outputs are based on reasonably available information and are used in the EIS to inform decision makers and the public of possible significant impacts on various resources.” He said that sounds good however, the next line reads, “these outputs do not form the basis of the analysis in this document however, instead the environmental analysis is based on a review of proposed changes to policy and procedures under which the DNR operated.” Mr. Harlow stated that this was confusing. The DEIS focuses on the changes in procedures and ignores the model outputs that could reveal potential impacts and thus fails to analyze the second major component of each alternative. It relies on the Environmental Impact Analysis in the HCP, which also analyzes policies and regulations but the HCP does not analyze a specific decadal sustainable harvest level and is therefore insufficient to disclose potential impacts associated with a specific harvest level.

He was further confused by another statement within the same paragraph “DNR considers the model outputs as the best information available to illustrate the range of likely outcomes for each alternative at the watershed scale.” He noted that in the DEIS there is no analysis of the impacts on each resource by alternative at the watershed scale.

He also stated the lack of clarity in the DEIS in regards to effects of procedural and regulation changes. He indicated that there may be a proposed change to a regulation or a policy, but without specifically knowing what it is, it is unknown how it was modeled or what the potential effects would be. Another issue is the lack of analysis for roads, indicating that this is the appropriate level it should be analyzed, not the operational level.

Mr. Harlow concluded by stating that the DEIS does not include enough information to adequately assess the potential environmental risks for a project of this magnitude. For a complete assessment more information has been requested by the Washington Forest Law Center through DNR’s Public Disclosure process. He said that DNR handles the requests professionally, however there is not enough time for the requests to go through the process before the comment period ends. He requested that the Board extend the comment period.

Chair Sutherland noted that although the comment period ends on December 19, the public may make comment through the entire process at Board meetings and hearings. There will also be public comment allowed on the Final EIS.

Angela Emery - Washington Forest Law Center (Handout 8)

Ms. Emery presented the Board with a chart indicating the past and proposed timber harvest levels on westside DNR lands since 1960 (created from DNR data). She mentioned the proposed timber harvest from Alternatives 5 & 6 noting they are above the vast majority of the actual harvest levels since 1965 and she asked where the timber would come from? She wondered if the alternatives are proposing a realistic harvest level and can they be met under the current HCP and environmental regulations. She did not think that information was presented in the DEIS analysis. She said that the harvest levels appear to come from riparian areas. Under Alternative 6 it was stated that riparian provisions would need to be changed, however the EIS does not present how this will be changed and this presents a lot of questions. She also stated that the EIS should define this more clearly and urged the Board to ask the same questions.

Bob Dick - American Forest Resource Council (AFRC) (Handout 9)

Mr. Dick commended the market forces report Jon Tweedale provided but noted that the reports of the demise of the timber market industry are exaggerated.

He then brought up two issues:

1) He drew the Board's attention to a letter he provided (Handout 9) detailing the economic analysis written for the Washington Environmental Council (WEC) titled Full Cost Accounting for Washington's State-Owned Forests: An Overview". AFRC notes serious flaws within the report and noted the list of issues (within Handout 9). He gave some examples - there was a USDA study cited talking about the value of forest uses and he indicated that the study was found erroneous several years ago and has not been used since then and said it is disappointing to see it used today. Another example is the climate change discussion in which the author suggests that land management policy should take into account climate change. The author admits that those projections are based on undependable models, which in turn are based on theoretical assumptions and to be basing short-term land management policies on those types of data is incautious. He said the study needs analysis and suggested it should be done by DNR or the beneficiaries and AFRC makes that recommendation.

2) Forest Certification - he brought up the recent hype in the press about the need to certify DNR trust lands and the AFRC disagrees with that. He stated that the forestry industry went through a difficult period between 1979 and 1983 and during that period they went to the Legislature asking for relief from timber sales that had been purchased from DNR and the Legislature agreed. Ultimately the issue went to the State Supreme Court and they voted 9 to 0 that the Legislation was unconstitutional. In that language, the Supreme Court unanimously agreed that these were real enforceable trusts that are there for the beneficiaries, not the forest industry or anyone else. Having said that, job one is to comply with the law and to comply with the HCP when developing the sustained yield. Then and only then, is it appropriate to look at certification. He stressed the complexities of certification issues noting that there are a number of certification systems available that are similar but do very different things. He added that paying for this complex process does not end with the receipt of the certification paper, there is an ongoing commitment to remaining certified. He recommended completion of the sustained yield process and to then look at certification opportunities.

He concluded by mentioning the Society of American Foresters Journal that just came out and noted that the entire issue is dedicated to certification. He said he is attempting to obtain enough copies for the Board members.

Aubrey Stargill - Forester in Bellingham with Neilson Bros. Incorporated

Mr. Stargill commented on the development of the Lake Whatcom Landscape Plan. He expressed concern stating Lake Whatcom is protected by the watershed analysis and Commissioner Belcher trumpeted that process. It was a system that provided board based scientific review, hydrologists, geologists, slope stability experts, wildlife experts, and was a comprehensive process. Mr. Stargill stated that he participated on the prescription team for the development of the watershed analysis and is familiar with the protection measures that are in place. He said that the state lands surrounding Lake Whatcom are also protected by the HCP, which was approved by agencies such as USFW and National Marine Fisheries, as being adequate for protecting the environment. He added that further reductions in operational ability to manage the lands in the watershed would provide diminishing returns in environmental protection and he believes that would be a breach of fiduciary responsibility for those lands in terms of foregone revenue to the taxpayers in Washington State.

He stated that Nielson Brothers is a large landowner in the watershed and they were supposed to have been formally consulted by DNR in the development of the landscape plan however he indicated that did not take place. He said the landscape committee did not have any diversity of representation on the committee and there was no industry representation and he thought it should have been more balanced. He added that the incremental loss of manageable state forestlands is a disservice to the taxpayers via

foregone revenues and to add additional protection would be frivolous and he urged the Board to consider these issues before adopting the landscape plan alternative.

Becky Kelley - Washington Environmental Council (WEC) (Handout 10)

Ms. Kelley referenced a form she provided the Board (Handout 10) regarding sustainable forestry titled "A Path to Sustainable State Forests" noting the WEC has been distributing it to the public asking for signatures if they agreed with WEC's basic approach to protecting old growth in the state's forests, forest stewardship council certification for state forests, logging at sustainable levels, and developing additional funding for school construction. She noted that attached to the form was a list of groups that agree with the general approach outline. The groups include a wide range including Earth Ministry, the League of Women Voters of Washington, the Mountaineers, Public Employees for Environmental Responsibility, etc. There were also a number of individuals including scientists and academics, businesses, 19 legislators, and government officials. She noted that WEC wanted to share the information with the Board today as they begin to discuss the state forests.

She also encouraged the Board not to do the mixing and matching process until the public comment period has closed (January 19) because those comments will influence the process. She indicated that WEC will suggest how they would like to mix and match the elements of the six alternatives in written comments they will be providing at the January 8, Board meeting.

She concluded with certification noting that she disagreed with Mr. Dick's comments and she thinks there is a place for certification within the Board's discussions. She brought up last week's updated Forest Stewardship Council Report and the Sustainable Forestry Initiative Report which was also issued last week, and she stated there is a lot of important information within the two reports for the task the Board is faced with over the next few months and she encouraged the Board to consider the information.

Nancy Peckman - Chair of the Washington State Society of American Foresters (WSSAF) (Handout 11)

Ms. Peckman commented on the sustainable harvest calculation noting that WSSAF represents forest resource professionals in western and central Washington and has followed, and spoken to, the sustained yield process. In December 2002, WSSAF adopted position statements supportive of a DNR trust land management and sustained yield project and she indicated that those statements are attached to her testimony (Handout 11). She said WSSAF recommended in its 2002 trust land management statement that the department examine all existing land constraints to better understand the impacts and alternatives of those constraints as well as to test a broad range of silviculture regimes, rotations lengths and geographic analysis groupings to offset reductions in harvest levels associated with habitat conservation. In the same statement WSSAF recommended the department seek a balance of environmental, social, and economic outputs. She said these are precisely the issues that DNR examined and that the Board will consider in the near future.

WSSAF members with expertise in sustained yield analysis continue to examine DNR's sustained yield process, EIS, and current alternatives. Their consensus is that DNR performed an unusually rigorous analysis and the quality of DNR's forest inventory, quality of expert review, and the extensive public involvement are particularly noteworthy. WSSAF does not presume to tell the Board which alternative or mix of alternatives should be selected however they firmly state that all six alternatives are legitimate, viable policy options. Given the well-tested trust mandate to produce income, and given the preliminary determination that all alternatives meet or exceed current environmental standards, in WSSAF's opinion, the final preferred alternative chosen or developed should be at the high end of the projected revenue production levels. She mentioned that DNR has committed to immediately begin work on an eastern Washington sustained yield analysis and WSSAF trusts that project will begin on completion of the western Washington project.

Ms. Peckman concluded with the statement “The prevailing philosophy has been that lower production equates to higher resources protection. Within reasonable bounds, the reverse is true. Keeping revenue generation high ensures the lands will remain attractive to beneficiaries as a revenue source rather than selling the lands to the highest bidder, thus encouraging conservation to non-forest uses. As our state continues to develop, DNR managed trust lands are too important to beneficiaries, the public, the state’s economy, and the production of forest products to lose.”

Rod Fleck - Attorney for City of Forks

Mr. Fleck commented on the Audubon Economic Study noting that the analysis did not focus enough attention on the circumstances of the 1990 and 2000 census in Washington and he asked the Board to closely examine the Social Economic Analysis produced by the grad student from the forest service as well as the WSU’s Rural Sociology Chair’s Report by Annabelle Kirshiner where she did a sub-county comparison of the economic impacts between the 1990 census and the 2000 census. He reminded the Board that the 1990 data was from 1989, which was the last surge of the spotted owl decisions. He questioned whether there has been value or benefit from recreational uses of non-harvested timber in the rural areas of Washington. In this area the median household income stayed flat over that decade. The poverty level in the greater Forks area has increased and the census went to 1 out of 5 to 1 out of 4 and the vacancy rates and owner occupied and rental housing doubled in the same time period. He wondered if the recreational value that has been assigned there might be showing up in other places. He also said there are some suspect values assigned to the benefits of the recreational use of the forest yet he noticed the impacts on the junior taxing districts and their inability to meet their requirements which should be part of any thorough analysis.

He added that they would be listening very carefully for a clarification on the role of the administrative owl circles and the (what he called) Belcher circles or Michael Perez-Gibson circles due to confusion from the document. In addition there is lack of clarity in the economic analysis for the counties noting the number he received from the department for the OESF for the forest board transfer lands for Clallam County don’t match up closely with the numbers in Table B6 and he requested clarification on that so they are used correctly.

Chair Sutherland asked if there was anyone else present wishing to make comment before the Board? Seeing none, hearing none. Chair Sutherland recessed for a break noting they would return for a working lunch during the SHC workshop.

Break 11:20

Reconvened 11:50

SUSTAINABLE HARVEST CALCULATION WORKSHOP

Bruce Mackey - Lands Steward, and Angus Brodie - Assistant Division Manager of Land Management Division, presented. Mr. Mackey began by clarifying the WSFW comments from earlier stating the DNR has a good working relationship with them and they have been intricately involved in the department’s marbled murrelet strategy and riparian strategy, and work cooperatively with the federal services. WSFW also has a position on DNR’s technical committee and Mr. Mackey expressed concern that the issue has come up at this time, however he wanted to clarify that the numbers in the model are place holders because they know that they will be modeling marbled murrelet and riparian strategies and in fact are very close. He also stated that the harvest deferrals in Table B3 on Page B45 of the DEIS, it appears that these things come off and are changed in 2007 but in reality they move from a deferred category to riparian into uplands and a large percentage of that is deferred. He suggested to the Board that the Table

needs clarification and they will bring that clarification back at the next Board meeting so the understanding is clear to the Board and to the public.

Chair Sutherland asked if Mr. Mackey would have those discussions with WFSW and the technical committee members?

Mr. Mackey said yes.

Terry Bergeson asked to have something in writing in January to address WFSW's concerns. She stated that the letter presented by WFSW (Handout 1) was very damning and stated that the Board has a great deal to decide upon in the next few months and she expects each legitimate concern be addressed, and when misunderstandings take place they need to be clarified in public. She stressed the importance of building consensus on a decision that makes sense to the state.

Mr. Mackey then laid out the plan for the workshop, stating that they will begin by walking through the process, noting James Cook's request for an open process that the public can understand, and then formulate questions and addressing those questions as they come up such as how much does income vary over time; how much of that are we willing to take; how much active silviculture vs. passive are we willing to undertake; how much risk are we willing to assume to reach the goal; is it important to reach healthy forests to develop older forests faster; or how much do we want and when? These are the underlying questions and the goal of today's workshop is to systematically walk the Board through the process to get to that level of detail. Another goal at the end of today's process is to make a choice between value regulation and volume regulation and decide which one is preferred and the implications.

Chair Sutherland asked if the intent is to clarify each of the six alternatives and to build a 7th mix and match alternative?

Mr. Mackey moved up to the seven flip charts and gave an overview of how the Board would move the elements such as value and volume and discuss the influences of those changes.

Bob Nichols noted that the DEIS is a substantial document and he had several questions marked within the document stating that he would prefer to have those questions addressed prior to going through the process.

Mr. Mackey indicated that the workshop process would provide an opportunity for those questions to be asked and answered. He added that nothing decided today would be definitive; it is an attempt to gear the Board for January's meeting. Mr. Mackey said the goal is to introduce the process for mixing and matching.

James Cook thought the process would help the Board to understand the components and encouraged the format of the workshop stating that his questions will most likely be answered through the process.

Bob Nichols agreed with moving forward with the process outline.

Terry Bergeson said she would be seeking clarification of volume vs. value and the dimensions of the six policy areas.

Mr. Mackey continued the presentation with the proposed decision process for selecting the preferred alternative, which incorporates: past board discussions; modeling and technical analysis; EIS results; and public comment.

Bob Nichols clarified that in the end the Board is adopting a sustained yield number, the EIS will substantiate that number, and sustainability within the “three circles” (economic, ecological, and social), goes with each, and he noted his frustration about the lack of the social aspect. He wanted assurance that the social impacts discussion would be taking place?

Mr. Mackey said yes, and the Board would need to decide how much emphasis would be placed on meeting social obligations and that will be a discussion the Board will have. He said that he could facilitate that discussion and bring information forward.

He then provided an example of modeling (Slide 3) showing the decision process and steps towards establishing a preferred alternative for sustainable forestry:

December 2, BNR Workshop

An example of compiling and modeling a mix and match alternative
Review of the completed policy and outcome matrix
Proposed timelines and process leading to selection of the preferred alternative

January 8, BNR Workshop

Overview of the DEIS public comments
BNR to create one or more mix and match draft alternative for their consideration on 2/2/03

February 2, BNR Workshop

Present model results for the new BNR mix and match alternative(s)
BNR dialogue on the key policy features for the preferred alternative
BNR selects key policy features to provide necessary guidance for DNR to construct preferred alternative

February 17, BNR Workshop

Preferred alternative model results presented to the BNR
BNR dialogue on the policy considerations and implications of the preferred alternative
Decision: BNR selects a preferred alternative starting the final EIS process
Spring 2004: Development of the model and the completion of the final EIS
June/July 2004: FEIS presented to BNR for final policy action

Mr. Mackey then told the Board he would be asking them to provide direction on the proposed decision process by identifying the key outcomes, identifying key policy issues, and creating a discussion matrix to aid in the understanding of how policy issues influence key outcomes. He asked the Board to determine what they consider “key outcomes” such as:

- 1) Revenue
- 2) Variability of income
- 3) Structurally complex forest structure
- 4) Implementation considerations
- 5) Long-term standing inventory
- 6) Others

Terry Bergeson suggested adding “social” to the key outcomes list under “others”.

Mr. Mackey indicated that the social discussion would come forward.

Mr. Brodie added that it was a struggle to illustrate the social circle and what aspect the Board would be interested in.

Bob Nichols said as he looked back at the scoping documents within the summary of the DEIS and the social and economic considerations were taken off and the reason given was that it was an environmental impacts statement and therefore social impacts are not discussed. He recalled very significant discussions about the three intersecting circles along with the social aspects and wants those included again.

Mr. Brodie agreed, noting that the staff needs direction from the Board on how they can help facilitate that discussion for the Board. He brought up Jean Daniel's report on Social Economic Resiliency, which was the first piece of information presented to the Board in an attempt to provide a backdrop of the social aspect. He stressed that the Board needs to clarify to staff what information is relevant to them.

Chair Sutherland gave an example: Wahkiakum County is the smallest county in the state with a small population and its primary source of revenue is based on timber harvest. It is also an area where there is significant environmental interface. He asked how one would develop a harvest flow that continues to provide that county a consistent revenue base as well as an employment base, and still recognize the environmental impacts? He suggested that staff consider those scenarios but was not sure what the structure of the discussions would be.

Bruce Bare noted Table 4.11-5 that speaks to the issue showing three counties in western Washington that have over 10% of their revenues attributable to DNR. He said in Jean Daniel's Report, two of those counties fell into the high dependency, low social resiliency categories. He added that there is also a hidden issue not mentioned in the matrix; the difference between a passive approach and an active approach, which has been seen in all of the alternatives, and he said this has a huge social impact on the counties, especially the counties mentioned in the Table. He said a more active approach generates a more economic activity, especially in Alternative 6, generating economic activity through thinning in the rural areas, which has an economic and a social impact. He said somehow that needs to be captured.

Mr. Brodie clarified by asking if they look at the types of activities and the extent of those activities by alternative and linking it to one of the policy areas such as silviculture?

Bruce Bare suggested that some type of multiplier that looks at income generation or employment generation as a consequence of the six alternatives might capture it. He said to try to reflect it back either by acres treated or harvest levels into those specific rural areas.

Jim Cook noted that in the agriculture environment when the social side is discussed it is in reference to the consumer. He added that there is only one reason to cut down and mill the trees and that is to build houses, and he wondered if there is any relationship between what the Board is doing with the SHC and how many families will be able to build homes or buy homes and what would the percentage of that cost be? He said that there is a huge consumer aspect, which needs to be considered on the social side.

Chair Sutherland asked Mr. Brodie to also consider whether the consumer would be benefited or would have a negative impact.

Jim Cook said it needs to be balanced stressing that whatever is decided should ensure there is no affect on housing starts or cost of homes, however he believes whatever they decide will have a big effect. He said if the discussion is about total cost accounting we need to take in the whole continuum not just draw

a circle around the communities that depend on the sale of the forest products, nor the people that enjoy the recreational benefits of the healthy forests.

Bruce Bare said that recent harvest statistics in western Washington show that DNR only makes up 12 to 15% of the total harvest, private is 80 to 82%, and federal is 2 to 3%. DNR is not the significant harvester.

Bob Nichols used Lake Whatcom as an example, and the prospect of the timber being taken off base due to social impacts and concerns. This needs to be factored into the economics and he asked if they could project, by alternative, a range of lands that may be subject to pressures that would take them off base?

Mr. Brodie said yes, that something like that has been done in trying to classify the land base. Mr. Brodie moved ahead to Slide 47, showing the 2004 land base described in three buckets: uplands with general objectives 26%; riparian and wetlands 31%; and uplands with specific objectives 43%.

Bob Nichols asked about uncertainties in the future and can those scenarios be built into the model?

Mr. Brodie said with current procedures we have placed in a long-term deferral and certain lands would be prohibited from harvesting activities. At the current time we don't have a riparian strategy that has been developed and finalized with the federal services so effectively we have our riparian areas off base except for access (Alternative 1 provides that picture). He said they could do some simple GIS exercises to look at what proportion of our lands sit within a certain radius of urban areas, we could do some parcel size analysis because smaller areas of land are more difficult to manage than larger blocks and that can be brought back to the Board.

The Board agreed.

Bruce Bare moved ahead to Slide 49, charts that compare across the alternatives, and pointed out the huge difference between Alternative 1 in terms of long-term deferrals in the upper northeast quadrant and in the southeast it's riparian and wetland (white area of the charts).

Bob Nichols was concerned about Alternative 6 because the management was anywhere from 35 to 73%, which seemed heavy, and the document indicated that information would be provided in the final. He said he needs that information now and he asked how he should request that type of information?

Bruce Bare noted that is only on 17% of the land base.

Bob Nichols said from the environmental point of view, that is a critical piece in relation to the social aspect.

Mr. Brodie said there are two interesting things that are interacting with the riparian management in Alternative 6, 1) from the inventory there is an estimate of the current conditions that exist within the riparian areas, and 2) what the management strategies, in terms of what the biodiversity pathways are attempting to do, which is to create some older forest structures or succession of structures. The interaction of those two things created a lot of light impact (thinnings) to drive the biodiversity pathways forward to develop those structures. There are a lot of riparian area stands that exist in a competitive exclusion stage (too many trees in the upper canopy) and the stands are not very diverse, so to create and accelerate those structures the stands need to be opened up through light thinnings. That is what is happening in Alternative 6.

Terry Bergeson clarified Mr. Brodie's statement asking if environmentally intensive management will be positive not negative?

Mr. Brodie said it's a tradeoff. There will likely be short-term impacts, which are indicated in the EIS but there are long-term benefits to moving the stands into an accelerated format into the desired stages. There are certain strategies laid out in the HCP that will still be implemented such as protection of the 25' "no touch" area around the stream banks, etc.

Bob Nichols asked for clarification about the impact to riparian areas because there seems to be faulty modeling assumptions that are going to be addressed in the final but he wants to know those now.

Mr. Brodie said they would restrain the amount of openings that would occur in riparian areas such as small patch cuts and clearings that would occur in Alternative 6, but what wasn't constrained was the amount of thinnings that could occur because the conditions are ideal for thinnings at certain periods of time. The questions then become - is that what we want to do as an agency; do we want to depend upon (in the third or fourth decade) a third of our revenue coming out of riparian areas; is that a good business management decision?

Bruce Bare said if they look at it from an inventory management perspective, almost half the volume is reported to be in the riparian area right now (23 billion board feet out of 52 billion) and when that is taken off base, what is received in exchange for it? Those tradeoffs must be looked at. He also pointed out that in Alternative 6, even though it's the most aggressive in terms of riparian thinnings, there is still inventory (over 70 years) built into the riparian zone indicating that more will be left than removed, which is a hallmark of ecosystem management. He said he thinks the idea of on and off base is one of the critical issues and he appreciates that continues to show up on the presentations.

Mr. Mackey said he thinks the Board has a broad vision of what they would like the forests to be, what kinds of fiduciary duties they have in meeting that, and the tools being presented are ways of creating the discussion that just took place.

Terry Bergeson brought up the "three circles" (economic, environmental, social) indicating there are social things on the environmental and economic side and in the middle of the three circles is sustainability and balance of the three circles. She said as the Board goes through the policy discussion and process the three circles need to continually be drawn out.

Glen Huntingford said when the HCP was adopted, the timber counties believed that there was not enough attention paid to the social and economic side and he doesn't want to see it happen with the Board's final decision for a preferred alternative. He added that as the Board selects a preferred alternative he would like to see a document of some kind accompany the alternative that illustrates the Board's thought process on all three of the circles, that way if anyone disagrees with the Board's decision, it can be validated that the appropriate discussions took place.

Chair Sutherland suggested a "findings and conclusions" document.

Mr. Mackey continued the presentation with Slide 7, noting the key policy choices for the Board:

- 1) Volume vs. value regulation
- 2) Type of silviculture
- 3) Timber harvest flow
- 4) Ownership groups

5) Amount of “on-base” land

6) Older forests

These policy choices are independent of each other and a separate decision can be made for each. Thinking about them as individual decisions allows them to be used as building blocks for a preferred alternative. However, the building blocks interact with each other and their combined impact on the outcomes will be modeled and analyzed in the Final EIS.

He then moved to the Matrix: background reference material for policy choices (Slide 8).

Terry Bergeson was unclear on the heading “Structurally Complex Forest structure” and asked what that meant?

Mr. Mackey said it’s asking how much we will have, when are we going to get it, are we going to exceed the HCP, and by how much?

Terry Bergeson then asked what the heading “Implementation Considerations” was for?

Mr. Mackey said cost and timing.

Terry Bergeson then asked for the significance of the “Long Standing Inventory” heading?

Mr. Brodie said it represents future opportunities. He added that it is important for the Board to have ownership in the list of outcomes and there are important outcomes not listed but they are analyzed in the EIS but they are not added yet because they want to wait until the comment period is complete. The outcomes listed are simply for purposes of this process/discussion.

Mr. Brodie then began to explain the matrix (Slide 8) and how it will be used. He indicated that it will be filled out with qualitative information to indicate what the influence is of any individual impact or policy issue such as volume, on each of the outcomes then summarize it. The matrix is a tool to illustrate the likely outcomes of various policy choices. It contains qualitative information about the likely outcomes that may result from a single change in the policy variable. The information is not quantitative in terms of number of dollars or acres of increase and does not describe “shadow prices/values” for the individual policy variables. Qualitative information is a result of DNR modeling, professional judgment and literature review.

He continued with volume vs. value. Using a limited definition, volume and value are just measurements of important outputs of the forest; volume is an expression of a production function i.e., it is a measure of how much wood is produced and Value is an expression of volume times price, i.e., it relates to the production function to economics. However, with broader definition, the management of the forest resource is influenced by what we decide to measure as outputs, for example: with volume we will concentrate on optimizing volume over time, subject to other objectives and constraints; with value we will concentrate on optimizing revenue over time, subject to other objectives and constraints.

Bruce Bare asked if Mr. Brodie was talking about gross revenue not net revenue?

Mr. Brodie said they are measurements of outputs. If you take value being net revenue then it is very different as an expression of output.

Chair Sutherland said it could be both over time. If you maximize both over time you are not sustainable, but they need to be flexible enough to be able to adjust when it's more important as a result of the price fluctuation.

Terry Bergeson said she would like to see the value issue predominate. If we could have more valuable trees, cut fewer, and make more money, we could balance environment, economic, and social.

Mr. Brodie said although these are simple measurements of output or ways of controlling and an expression of objectives, they actually influence a series of management decisions that occur in trying to meet the objective. So, in the case of volume, we will concentrate on just volume on either maximizing it or optimizing it or however the Board wants to express that objective. When value is discussed, you will concentrate on maximizing or optimizing revenue over time.

Bob Nichols asked if both volume and value could be modeled together (per Chair Sutherland's statement)?

Mr. Brodie said they measure both so they may be interested in setting up management that will optimize revenue over time but that should be done with a certain flow of volume over time and that way both are achieved.

Bruce Bare said in Alternative 5 there are two parts to the value, 1) instead of following a volume growth curve you would follow a value growth curve so in the model you would prioritize stands in the value maximization according to the value growth curve, however in Alternatives 1, 2, 3, & 4, the volume was done, and 2) a harvest flow constraint was imposed and it is a variation of a range of harvest value over time.

Mr. Brodie said if they just concentrated on value/revenue, then at times when prices are low then more will be harvested and when prices are high, then less will be harvested. He said the goal is to have a certain amount of activity to occur on a land base. He then presented a conceptual construct (Slide 11) which views the policy issues as a decision tree. It shows how decisions around volume or value drive other decisions. The chart included silviculture, flow, ownership groups, land on-base, and amount of older forests.

Mr. Brodie noted that there are two components to Alternatives 5 & 6 that are important, 1) the individual regimes that are done through a net present value analysis, and 2) the yield tables which are value; they are not discounted.

He continued with volume vs. value in calculating timber harvest (Slide 13). A focus on value control over volume control will likely result in:

Positive

Effect on gross revenues in short-term and long-term as a result on attempting to maximize value from the forest.

Neutral

Effect on amount of income variability the individual trusts experience; effect on amount of complex forest conditions; impact on long-term standing inventory.

Increase

In-costs as a result of increased silviculture activities and investments.

Delay

In implementing the value-based strategies as challenges of cash flow limitations and organizational change are over come.

He then went to a new version of the matrix (Slide 14) indicating the way the columns are now being filled in with the information from the discussion.

Bob Nichols asked why there was a differentiation between near-term and long-term revenue?

Mr. Brodie said it is to show whether there would be a short-term impact within the next decade; near-term is one decade and long-term is beyond that decade.

Bob Nichols then asked what “delay” under “timing” meant?

Mr. Brodie said it indicates how quickly it can be done.

Terry Bergeson asked what the difference is between “same” and “neutral”?

Mr. Brodie said “same” means it will be the same projection and likely outcome as what was seen in Alternative 1, and “neutral” means there is no impact. He added that the filling out of the matrix was done through some of the results done in the sensitivity analysis and also through knowledge of basic theory around forest modeling and internal discussions.

Mr. Mackey asked the Board if they wanted to walk through the elements of silviculture?

Jim cook said yes. He also brought up an earlier discussion regarding the number of rings per inch and the extra value that comes from that quality of timber, and asked if DNR’s silvicultural methods aim towards increasing the number of rings per inch or to increase the volume of wood harvested? He stated that will clearly have an impact on value and it appears that thinnings will make the trees grow faster.

Mr. Brodie said it depends on the objective and how we are determining our forest management i.e., are we interested in volume and maximizing volume or value/revenue. Having this overall policy discussion that has begun today, and receiving direction from the Board as to what should be looked at by staff, then that will determine the operational level of decisions. In Jon Tweedale’s section, they are looking at portfolio types of products coming forward; some will have tight ring counts and some won’t. Another component is what the future stands will look like.

Chair Sutherland added that it becomes more complex as other species of trees are added such as Douglas fir, hemlock, or alder.

Mr. Mackey provided a comparison - an apple farmer decides whether to plant red delicious or fuji, and once planted, the farmer hopes that in the future there is an actual demand for them and if there is, he hopes to get a good price for them.

Jim Cook noted that quality is becoming more important to remain competitive in the market place.

Mr. Mackey said that unlike a fruit grower, our quality comes because we grow it slower so there is a tradeoff in the amount of time it takes to achieve the quality and a lot more unpredictability.

Mr. Brodie presented Slide 15 on “Current DNR Silviculture”:

Silviculture is the art and science of cultivating forests to deliberately achieve objectives (to grow trees, one needs clear objectives that can be measured as a desired future state).

The primary goal of the Forest Resource Plan is to conserve and enhance the natural resources of state forestlands while producing long-term, stable income from these lands (historically, resource protection used a set-aside management approach, e.g., owl circles and old growth research areas).

Silviculture management activities are: reforestation by planting or natural seeding, including site preparation and use of improved stock, and vegetation control; stand tending – thinning (both commercial and non-commercial), pruning and fertilizations; and regeneration harvest at the end of the rotation.

Key components of DNR's current silviculture are determined by the investment criteria (Policy No. 11) balancing of biological productivity and economic potential. This policy in large part determines: the types of silviculture activities a stand might be treated with; determines the maturity criteria for the stand i.e., the minimum age that a stand may be regenerated, for example a Douglas fir average site (site class III) is likely to be planted with improved stock, be treated for competing vegetation, pre-commercially thinned, thinned at approximately 30 years of age, be final harvested with leave trees and regenerated at 60 years (this is a classic even-age management regime).

Jim Cook asked what minimum silviculture would do to ring density?

Mr. Brodie said it depends on the extent of the thinnings done. It could have a positive affect because the wood would be held for a longer period of time.

Chair Sutherland asked if we were to do minimal silviculture and increase the duration of the harvest rotation, does that also increase the vulnerability of the forest to insect and disease?

Mr. Brodie said it depends on how much of the area can be commercially thinned. If an area can't be thinned, then the stands will be denser and that would benefit the ring count but could create too many stands leaving the area in competitive exclusion.

He continued with Slide 18 - policy issues and outcomes in implementing current DNR silviculture into the matrix (as in Alternatives 1, 2, & 3): not change the mix of forest products and therefore DNR's revenue earning ability short-term or long-term (same); not increase the area or reduce the time to develop more complex forest stand conditions (same); not change the implementation costs beyond the range now experienced (same); not be challenged to implement (same); not impact the long-term standing inventory (same).

Minimum Silviculture (Slide 19):

Silviculture intensity is determined by the management objectives.

One key objective is the return on investment as measured by net present value.

If the all other objectives are the same, then the investment criteria become important in determining what type of silviculture is implemented.

Biological productivity maximization generally will result in longer rotations (near culmination of mean annual increment) and minimal silvicultural investment at the expense of direct economic returns.

Longer rotations delays the time of final harvest; the delay, once discounted, makes it difficult to justify early silvicultural investments, as these "costs" don't yield returns for a long time.

Thinnings, especially those later into the rotations, help to maintain growth of the stands, provide cash-flow but may reduce total yield.

Minimizing investments in silviculture reduce volumes in the short-run and reduce gross revenue.

In the long-term, if other constraints are non-binding, harvest volumes and values should increase due to a price premium for larger diameter wood unless there is a price penalty for larger trees.

Longer rotations, with thinnings, will maintain growth and will produce larger trees into the future.

These forest stands will, in time, likely have the structural characteristics for northern spotted owl habitat.

Longer rotations maintain more forest cover and will increase the standing inventory for over the long-term.

Intensive Silviculture (Slide 23):

If all other objectives are the same, the investment criteria become important in determining what type of silviculture is implemented.

Where a management objective is to maximize net present value (economic potential), the result will lead to higher investment in stand activities and a shorter rotation length.

Increased use of improved stock, higher planting densities, fertilization and lower maturity criteria are all used to increase financial yields.

Increased harvest activities will generate greater revenues at a greater cost. If costs are controlled, net income to the beneficiaries should increase.

Intensive silviculture is only practiced on on-base lands. Designated habitat and resource sensitive areas are managed differently to meet specific objectives and minimize costs. Relative to current practices, this has no impact on the development of more complex forests.

This traditional even-age style of silviculture is well understood by Department staff and implementations would be straightforward. However, financing the silviculture investments, particularly improvements for planting stock, site preparation, fertilization and thinnings (pre and commercial) would be a challenge due to current limited cash flow.

Stand inventories would be lower over the long-term, as they adjust the new management regimes.

Biodiversity pathways in designated habitat management areas:

The goal is to simultaneously manage for forest structure, conservation benefits and revenues; this is done both at the stand and landscape levels. Individual forest stands are the basic components of the landscape and techniques include “variable density thinning”, understory planting and management, snag and down woody treatments. Stands are typically treated on alternating long and short rotations.

Impacts on outcomes of biodiversity pathways in designated habitat management areas:

Implementing variable density thinning and biodiversity pathways effectively results in more land being managed through silviculture (riparian and northern spotted owl habitat management areas). The extent of active management reduces the need for single purpose set-asides to achieve conservation objectives.

Variable density thinning, snag and down woody treatments and under-planting are all designed to accelerate forest structure development. Therefore, biodiversity pathway management should increase and maintain the amount of area in complex forest structure and reduce the time in developing it.

Biodiversity pathways are largely experimental. Therefore, initial costs and speed of implementation are likely to be high and slow. The impact on inventory would probably be neutral.

Chair Sutherland asked what would happen to the amount of old growth under “intense silviculture”?

Mr. Brodie said assuming that nothing else would change, there would still be the existing policy and HCP strategies in place so there should be no impact. It should be a neutral impact.

Bob Nichols asked how they ended up with so many trees in the competitive exclusion stage?

Bruce Bare said there was a huge change in the paradigm (sustainable forests).

Bob Nichols asked what would happen if we go down this new biodiversity pathway paradigm, which is a sign of the times, but in the future that may not prove to be best for the long-run?

Mr. Brodie indicated that this is only being applied across the land base that is designated for habitat management. The idea of biodiversity pathway management, or principally variable density thinning, is to create forest structures and those forest structures being the ones we want across the land bases to support the species under the HCP (riparian areas; nesting, roosting, foraging, & dispersal areas for northern spotted owl management; and OESF) approximately 500,000 acres.

Mr. Brodie then showed some photos of thinnings and pre-thinnings and described the variabilities.

Break 1:50

Reconvened 2:05

SUSTAINABLE HARVEST CALCULATION WORKSHOP CONTINUED

Chair Sutherland mentioned to the Board that Craig Partridge - Policy Director, is making copies of information for the Board regarding the Lake Whatcom EIS and the preferred alternative and will provide the information before the end of the meeting. He noted that it will be on the January 8, Board agenda.

Mr. Mackey then continued the workshop stating he wanted to achieve three things by the end of the workshop today, 1) get through the matrix process, 2) have Bruce Bare to provide of what he would consider an example that staff could run, and 3) have a sense of where the Board wants to go and incorporate the time needed to have the discussion as a reference tool.

Bruce Bare then provided an example of a possible set of mix and match pieces (he asked Mr. Brodie to pull up a more complete version of the matrix - [Slide 54]) and noted the green items in the matrix, which indicate positive increases, and the yellow which indicate decreases or delays, and he pointed out that there are a lot more greens than yellows. He said he attempted to find a couple of additional runs that would mix and match and he came up with three, the first being:

1) Looking at Alternative 6, he said he would like to see the same run as in the DEIS but incorporate the harvest flow constraint that was used in Alternative 3. Also, attempt to promote biodiversity pathways more on the uplands rather than in the riparian areas.

Terry Bergeson asked Bruce bare what he expected to happen with that particular run?

Bruce Bare said he thinks it will follow the matrix; it will have positive impacts on revenue and it will show the amount of complex forest. He wants to know if it will increase as projected. He said the harvest flow constraint in Alternative 3 is much less constraining than in Alternative 6.

Glen Huntingford asked if this suggested run is made, could they then easily do a run to see what the cost and net would be if it fits within the model?

Mr. Brodie said yes, and they would bring all of the parameters back to the Board.

Mr. Brodie then discussed harvest flow (Slides 31-34) “Timber Harvest Flow Control”, is the rate, amount, and timing of timber harvested from the on-base lands. The more demanding the flow control, the larger the constraint on the land-base, i.e., when forest conditions are distributed un-evenly within a sustained yield unit, an absolute “even-flow” objective becomes a constraint on the amount of volume and silviculture activity that can occur. A constraint results, because older forest stands must be held to “fill-in-gaps” until forest becomes regulated, i.e., has an even distribution.

When the age classes are distributed un-evenly within a sustainable harvest unit, a “flexible” or softer timber harvest flow objective does not constrain the land-base. A softer timber harvest flow objective may increase the level of variability in timber harvest flow over time for individual trusts. The level of increase in variability that a trust may experience is influenced by the starting inventory.

Relative even-flow such as in Alternatives 1 & 4; the expectation is that any decade will not vary more than a +/-25% from a long-term average.

Relative non-declining even-flow such as in Alternative 2; the expectation is that harvests will increase over time.

Relative unconstrained flow such as in Alternative 3; the expectation is that there will be no cessation or prolonged curtailment in harvest (legal minimum).

Modulated flow such as in Alternatives 5 & 6; the expectation is that harvest will not vary more than a +/- 25% in volume from one decade to the next.

Bruce Bare suggested another run (calling this one 6-B) regarding the ownership groups noting that in the matrix under ownership groups, there were positive impacts on revenue, yet neutral on almost everything else by going to one ownership group; he said he would like to see an additional column (6b which is 6a plus one ownership group instead of 20). According to the matrix, you can get more revenue without neutral impacts on biodiversity, structural complexity, in-cost, and long-term standing inventory, and it's worth looking at. He said it might have an increased income variability that will come with it and that's the tradeoff.

Mr. Brodie said there would be differences between the different trusts depending upon their size, distribution across the landscape, and the current status of the forest conditions.

Bob Nichols asked if different components not shown in the 6 within the matrix could be used in the Board's mix and matching approach?

Mr. Brodie said yes, but cautioned that the six were designed because they were the policy levers.

Mr. Brodie moved on to ownership groups (Slides 36-42). Current policy is 24 units on the Westside which are: the Olympic Experimental State Forest (OESF) and Capitol Forest (2); Forest Board Transfer in separate counties (17); and Federal Grant and Forest Board Purchase grouped in separate WADNR Regions (5). He emphasized that ownership groups are the sustainable harvest units and they don't change the trust ownership for the pieces of land within them, so when it's stated, “putting everything into one ownership group” it does not mean they are putting everything into one trust. It simply means that they are organizing how the harvest will be calculated within the different sustained yield units.

Chair Sutherland said during the Board's considerations, particularly as it relates to the HCP, it is also on the east slopes of the Cascade Mountain Range and he asked how that was dealt with?

Mr. Brodie said they are not contemplated nor put into the calculation; it is all westside.

Chair Sutherland said he would be asking them to run an ownership of four: Northwest, Olympic, South Puget Sound, and the newly merged region (name not determined yet).

Mr. Brodie clarified Chair Sutherland's request - that they are to take all of the forest board lands and run them in the four groups, including the OESF and Capital Forest?

Chair Sutherland said yes.

Terry Bergeson asked Chair Sutherland if the intent is to put everybody into those 4 regions and look at 4 numbers instead of 24 numbers?

Chair Sutherland said yes.

Mr. Brodie continued with ownership groups stating they are the spatial units used in determining the sustainable harvest levels. The size and number of the ownership groups a forest has is unimportant *if* the forest conditions (e.g., age classes distribution) are the same across all landscapes, however age class is not distributed evenly across trusts - for example Federally Granted Trusts, therefore as we make smaller units, and a constraint was created on the land-base, while larger units relieve this constraint, however, the constraint can be beneficial if an objective is to reduce variability in revenue over time.

Likely outcome from changing ownership groups; reducing the number of ownership groups will increase revenues and increase the variability of revenue flow to the trusts.

Mr. Brodie then moved to the on-base and off-base lands discussion (Slides 44-49).

On-Base acres are forestlands that are available for silviculture activities and timber harvests, for example, uplands with general objectives and uplands with specific objectives and riparian areas under some alternatives. The type of silviculture activities may be constrained to meet some specific objectives, such as development of northern spotted owl habitat, visual management, or rain-on-snow area management.

Off-Base acres are forest lands deferred from silvicultural activities and timber harvest for a specific period of time. Short-term deferrals are assumed to be released from the deferral status during the first decade. Long-term-deferrals are assumed to be maintained in deferral status for more than the first decade.

Available on-base lands are lands available for revenue generation is determined by deferred areas - deferred from silviculture investment and timber harvest activities for a period of time; often used to protect sensitive resources as in parks and reserves, or in a managed landscape situation, until an alternative management plan is implemented (northern spotted owl circles and forest stands occupied by marble murrelets).

Area constraints - restriction imposed to meet a specific management objective, i.e., for rain on snow management, DNR maintains 66% of DNR managed lands within a rain-on-snow sub-basin with forest stands 25 years and older (HCP and Procedure 14-004-060); in all watershed administrative units (WAU) where DNR manages more than 5% of the WAU area, DNR maintains 50% of its management area with forest stands 25 years and older (Task 14-001-010, maintaining mature forest components).

Mr. Brodie showed charts of the land base (Slides 47-49).

Slide 47 - policy and procedural land classification for DNR managed state forestlands in western Washington in 2004 (approximately 1.4 million acres): 26% uplands with general objectives; 31% riparian and wetlands; 43% uplands with specific objectives.

Slide 49 - off base acres during the first decade (2004-20013):

Alternative 1 - 3% short-term deferrals; 17% riparian and wetlands; 22% uplands with general objectives; 23% uplands with specific objectives; 35% long-term deferrals.

Alternative 2 - 15% short-term deferrals; 15% riparian and wetlands; 20% long-term deferrals; 25% uplands with general objectives; 25% uplands with specific objectives.

Alternative 4 - 17% long-term deferrals; 17% riparian and wetlands; 20% short-term deferrals; 2% uplands with general objectives; 24% uplands with specific objectives.

Alternatives 3, 5, & 6 - 15% long-term deferrals; 17% riparian and wetlands; 22% uplands with general objectives; 22% short-term deferrals; 24% uplands with specific objectives.

Chair Sutherland asked if all NAP's have resource conservation?

Mr. Brodie said yes, they are included in the deferrals and they are about 3% of the total land base.

Mr. Mackey added that the on and off-base lands, while there may be more acres treated in Alternatives 5 & 6 for example, the intensity in what is being done there varies greatly.

Bruce Bare asked if there is a goal to end inventory?

Mr. Brodie said he doesn't know. He added that as silvicultures are changed then inventories will change. He said they try to track inventory to be sure of what is happening such as whether it is increasing, declining, or remaining constant. Having less inventory than we do today would suggest that some of the future opportunities may be disappearing.

Bruce Bare said under Alternative 1, after 70 years it is roughly the same.

Mr. Brodie said the standing inventory may be incorrect and should be closer to 30 - 32 billion and the ending inventories are approximately 50 billion.

Terry Bergeson suggested one more run - under #5 (intensive management), silviculture is set at a 50-year rotation and she asked that they push it down to a 45 year rotation bringing it closer to the industrial model.

Mr. Brodie said they would drop the maturity criteria for all of the species down another five years and maybe the technical review committee would look at stocking.

Terry Bergeson departed at 3:05.

Other slides provided to the Board included:

Older Forests And Old Growth - policy choices include “basis protection” i.e., old growth research areas, OESF HCP landscape thresholds; “site specific protection” i.e., place off-base stands that are currently older than 160 years old; “landscape targets” i.e., targeting the long-term restoration and maintenance of 10-15% of each HCP unit for older forest conditions (as defined by DNR’s HCP).

Older Forest Policy Options Chart

Change in Structurally Complex Forests - showing % change in 2067 compared to 2004.

Matrix: Background Reference Material for Policy Choices - policies that strongly influence revenue earnings are volume vs. value, silviculture, timber harvest flow, ownership groups, and short-term deferrals. Policies that strongly influence income variability are timber harvest flow and ownership groups. Policies that strongly influence the amount of structurally complex forest are silviculture and short-term deferrals. Combining policies can also be used to influence desired outcomes, however, the interactions are often unpredictable, hence the use of the model to help identify unknown consequences.

Mr. Mackey summarized stating at the January 8, Board meeting they will continue the discussion with old growth and come back to Bob Nichols’ discussion on the DEIS. He noted that the goal of today’s discussion was 1) to see the different policies independently and what they do, and 2) to see the five issues that impact the revenue, two that impact income variability, and two that impact structure i.e., how you get it and how fast.

Summary Slide 56:

- 1) Examine the independent policy issues and their impact on important outcomes (revenue, income, variability, amount of complex forest structure, implementation, and standing inventory).
- 2) With knowledge of the likely impacts of proposed changes to policy issues, you can examine how different policy issues might be combined into an alternative (a card game has been constructed to help visualize this).

Mr. Brodie added that they would also attempt to incorporate the issues discussed around the social and environmental aspects.

Mr. Mackey instructed the Board to weigh the outcomes; include social and ecological across the top.

Glen Huntingford asked if the Board would be receiving public comments from the upcoming public hearings prior to the January 8, Board meeting?

Mr. Brodie said they hope to have them in overview form but the formal response will not be prepared (it will be in the FEIS).

Bob Nichols requested to be able to review the public comments and have ample opportunity to have a strong exchange at the January 8, meeting.

Chair Sutherland indicated that Bruce Mackey and Angus Brodie intent to meet with the Board members individually prior to the January meeting to ensure questions and comments are addressed to better prepare for the meeting. He added that today’s discussions were very useful and thought the pace of the workshop was appropriate. He indicated that they are very close to being on schedule with to Mr. Mackey’s plan. He also said it appears that the Board is nearing a consensus of what the preferred alternative could be. He thanked the staff for their hard work.

Chair Sutherland provided the Board with one last document (Handout 13) from the Lake Whatcom Landscape Plan (it was a definition of the preferred alternative).

Meeting adjourned at 3:10 p.m.

Approved this ____ day of _____, 2004

Doug Sutherland, Commissioner of Public Lands

Bob Nichols for Governor Gary Locke

Bruce Bare, Dean, University of Washington

R. James Cook, Dean, Washington State University (Interim)

Terry Bergeson, Superintendent of Public Instruction

Glen Huntingford, Commissioner, Jefferson County

Attest:

Maureen Malahovsky, Board Coordinator